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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,342	11/26/2003	Jari Syrjarinne	944-001.122	5263
4955	7590	01/30/2006	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			GANITT, ALAN T	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/727,342	SYRJARINNE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Alan T. Gantt	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 3,5,12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>92605</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments filed 9/12/05 have been fully considered but they are not persuasive. Applicant primarily argues that the motion sensor of Healy is used not only in providing signals to the processor used in determining whether to power down the GPS receiver, but is also used for the non-maskable interrupt (NMI) logic circuit which is unrelated to the GPS receiver. Even if there were no GPS receiver in the Healey system, there would still need to be a motion sensor to provide motion sensor signals to the NMI circuit. The mechanical coupling of the motion sensor taught by Copley would make it difficult to provide signals from the motion sensor to the NMI logic circuit of Healy.

Regarding applicant's arguments, although the motion sensor of Healy may be used for a couple of tasks, it is still used for the powering down of the GPS receiver. Mechanical coupling of the motion sensor is, thus, a viable option for getting the sensor result to the ranging receiver. Applicant doesn't give a reason in his specification why the coupling to the ranging has to be a mechanical coupling. Further, Healy states that there are at least four other means to generate the NMI signal other than the motion sensor. Therefore, the use of mechanical coupling of the motion sensor to the ranging receiver does not have to cause difficulty in providing a signal to the NMI logic circuit. Thus, the motivation for combining the Healy and Copley references of providing greater assurance of connectivity still holds.

Claims 1, 2, 4, 6-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Healy et al., in view of Copley et al.

Regarding claim 1, Healy discloses a laser based tactical engagement simulation training system characterized by a communication code structure for the system. An apparatus, comprising a ranging receiver (paragraph 0074 – the GPS receiver), for providing output signals indicating information as to the position or motion of the ranging receiver (paragraph 0074), the apparatus characterized in that: the ranging receiver is responsive to power control signals based on sensor signals indicating whether the ranging receiver (paragraph 0073) is in motion, the power control signals for powering on or off selected components of the ranging receiver (paragraph 0085); and in that the apparatus further comprises: a motion sensor (paragraph 0085). Healy does not show a mechanical coupling to the ranging receiver.

Copley discloses a system for monitoring the location of individuals and includes a wearable device and a portable device operatively coupled to the wearable device. (Abstract)  
Copley meets the limitation:

mechanically coupled to the ranging receiver, for providing the sensor signals. (Figure 2, refs. 116, 216, and 223)

Healy and Copley are combinable because they share a common endeavor, namely devices that monitor location and motion. At the time of the applicant's invention it would have

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been obvious to modify Healy to include a mechanical coupling of the motion sensor to the range receiver as done by Copley in order to provide greater assurance of connectivity.

Regarding claim 2, Copley meets the limitation -An apparatus as in claim 1, further characterized by a controller (paragraph 0079), responsive to the sensor signals, for providing the power control signals so as to power down the selected components of the ranging receiver if the sensor signals indicate that the ranging receiver is substantially stationary. (paragraph 0079)

Regarding claim 4, Healy meets the limitation -An apparatus as in claim 1, wherein the controller re-applies power to the selected components as soon as the motion sensor indicates significant motion of the ranging receiver (paragraph 0074).

Regarding claim 6, the examiner takes Official Notice that it is well known utilize a motion sensor that is a MEMS-based motion sensor and that it would have been obvious to modify the Healy / Copley to include MEMS-based motion sensors due to performance, market acceptance and demand.

Regarding claim 7, Copley meets the limitation - An apparatus as in claim 1, wherein the motion sensor comprises an electronic compass or an accelerometer. (paragraph 0066)

Regarding claim 8, Healy meets the limitation - A system, comprising: an apparatus as in claim 1, and further comprising one or more ranging satellites for providing ranging signals conveying navigation information (paragraph 0074), wherein the apparatus provides the output signals indicating information as to the position or motion of the ranging receiver based on the ranging signals (paragraph 0074).

Regarding claim 9, Copley meets the limitation - A system, comprising: a cellular communication terminal including an apparatus as in claim 1, and a cellular communication network by which the cellular communication terminal is communicative with other communication terminals (paragraph 0084).

Regarding claim 10, Copley meets the limitation - A system, comprising: a cellular communication terminal including an apparatus as in claim 1; a cellular communication network by which the cellular communication terminal is communicative with other communication terminals (paragraph 0084); and one or more ranging satellites for providing ranging signals conveying navigation information, (paragraphs 0078 and 0088) wherein the apparatus provides the output signals indicating information as to the position or motion of the ranging receiver based on the ranging signals (paragraphs 0089, 0095, 0131).

Regarding claim 11, Healy discloses a laser based tactical engagement simulation training system characterized by a communication code structure for the system. Thus, Healy includes a method for saving power consumed by a ranging receiver (paragraph 0074),

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characterized by:

a step (22) of powering down selected components of the ranging receiver (12) based on whether the sensor signals indicate only at most insubstantial motion of the ranging receiver (paragraphs 0073 and 0074).

Healy does not show a mechanical coupling to the ranging receiver.

Copley discloses a system for monitoring the location of individuals and includes a wearable device and a portable device operatively coupled to the wearable device. (Abstract)

Copley meets the limitation:

a step of reading sensor signals provided by a motion sensor mechanically coupled to the ranging receiver (Figure 2, refs. 116, 216, and 223)

Healy and Copley are combinable because they share a common endeavor, namely devices that monitor location and motion. At the time of the applicant's invention it would have been obvious to modify Healy to include a mechanical coupling of the motion sensor to the range receiver as done by Copley in order to provide greater assurance of connectivity.

Regarding claim 13, The Healy / Copley combination provides for the steps outlined in claim 11. However, that combination does not provide for a computer readable storage structure embodying computer program code for execution by a computer processor.

However, The examiner takes Official Notice that it is well known to utilize a computer program product such as a disk containing software providing for execution of the steps by a

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computer processor and that it would have been obvious to modify Healy/ Copley to utilize such a computer program product as a means of storage of these steps for later execution.

*Allowable Subject Matter*

Claims 3, 5, 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3 and 14, the use of the output signals from the ranging receiver to decide whether the ranging receiver is substantially stationary in deciding to power down select components, in addition signals from motion sensors that indicate the ranging receiver is substantially stationary in deciding to power down components was neither found, suggested, nor made evident by the prior art.

Regarding claims 5 and 12, the use of a restraint in reapplying power to selected components of a ranging receiver such that power will not for a predetermined time if the motion sensors indicate motion of at most several centimeters per minute was neither found, suggested, nor made evident by the prior art.



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (571) 273-8300.

Any inquiry of a general nature or relating to this application should be directed to Supervisory Patent Examiner Nay Maung at telephone number (571) 272-7882.

*Alan T. Gantt*

Alan T. Gantt

December 10, 2005

EDAN ORGAD  
PATENT EXAMINER/TELECOMM.

*LO 12/22/05*